## AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Claims 1 and 33 are canceled without prejudice or disclaimer.
Claims 34-39 are newly added.

## Listing of Claims:

1. (Canceled)

2. (Currently Amended) A method ~~to operate a wireless network with a mobile station MS,~~ comprising:

~~in response to detecting that the MS has changed its location in the wireless network, and that the MS is in an Idle state, sending~~ receiving, by a base station BS, a message from ~~the~~ a mobile station MS ~~to a base station BS~~ within a wireless network, the message indicating ~~the~~ a current location of the MS and that the MS is in an Idle state; and

triggering the sending of further messages in the wireless network from the BS to a Packet Control Function PCF, and from the PCF to a Packet Data Serving Node PDSN, and from the PDSN to an Authentication, Authorization and Accounting AAA server, such that information that is indicative of a current BS/PCF/PDSN affiliation of the MS at the current location of the MS is recorded by the AAA server.

3. (Original) A method as in claim 2, where the MS is identified by its International Mobile Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.

4. (Original) A method as in claim 2, further comprising, in response to a presence of packet data to be sent to the MS, querying the AAA server to obtain the current BS/PCF/PDSN affiliation of

the MS.

5. (Original) A method as in claim 2, where detecting comprises receiving a sub-paging zone identifier with the MS, comparing the received sub-paging zone identifier with a previously received sub-paging zone identifier, and detecting that the MS has changed its location in the wireless network when the received sub-paging zone identifier does not match with the previously received sub-paging zone identifier.

6. (Original) A method as in claim 2, where the information comprises a sub-paging zone identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the PDSN.

7. (Original) A method as in claim 6, further comprising, in response to an occurrence of a network initiated data session (NIDS) for the MS, querying the AAA server to obtain at least the SPZ_ID, PZID and PDSN IP Address that are recorded for the MS.

8. (Currently Amended) A method ~~to operate a wireless network with a mobile station MS,~~ comprising:

in response to receiving a Registration message from a <u>mobile station</u> MS at a base station BS <u>within a wireless network</u>, the Registration message containing a sub-paging zone identifier SPZ_ID, sending further messages in the wireless network from the BS to a Packet Control Function PCF, from the PCF to a Packet Data Serving Node PDSN, and from the PDSN to an Authentication, Authorization and Accounting AAA server, such that information that is indicative of a current location of the MS is recorded by the AAA server; and

in response to an occurrence of a network initiated data session (NIDS) for the MS, querying the AAA server to obtain at least the current location of the MS.

9. (Original) A method as in claim 8, where the MS is identified by its International Mobile

Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.

10. (Original) A method as in claim 8, where the information comprises the sub-paging zone identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the PDSN.

11. (Original) A method as in claim 10, where querying comprises querying the AAA server to obtain at least the SPZ_ID, PZID and PDSN IP Address that are recorded for the MS.

12. (Original) A method as in claim 8, where the message sent from the PDSN to the AAA server is sent via a Lightweight Directory Access Protocol LDAP interface.

13. (Original) A method as in claim 8, where the message sent from the PDSN to the AAA server is sent via a JAVA/SQL interface.

14. (Original) A method as in claim 8, where the message sent from the PDSN to the AAA server is sent via a visited AAA server.

15. (Original) A method as in claim 8, where the message sent from the PDSN to the AAA server is sent via at least one broker AAA server.

16. (Original) A method as in claim 8, where the message sent from the PCF to the PDSN is sent via an A10/A11 interface.

17. (Original) A wireless network operable with a mobile station MS, comprising a base station BS, responsive to receiving a Registration message from a MS that contains a sub-paging zone identifier SPZ_ID, for sending a message from the BS to a Packet Control Function PCF via an A8/A9 interface, said PCF, in response to receiving the message from the BS, for sending a message to a Packet Data Serving Node PDSN via an A10/A11 interface, said PDSN, responsive to receiving the message from the PCF, for sending a message to a home Authentication,

Authorization and Accounting AAA server via one of a Lightweight Directory Access Protocol LDAP interface or a JAVA/SQL interface, said home AAA server recording information that is indicative of a current location of the MS, and further being responsive to a query received in response to an occurrence of a network initiated data session (NIDS) for the MS, for returning at least the current location of the MS.

18. (Original) A wireless network as in claim 17, where the MS is identified by its International Mobile Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.

19. (Original) A wireless network as in claim 17, where the information comprises the sub-paging zone identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the PDSN.

20. (Original) A wireless network as in claim 19, where querying comprises querying the home AAA server to obtain at least the SPZ_ID, PZID and PDSN IP Address that are recorded for the MS.

21. (Original) A wireless network as in claim 17, where the message sent from the PDSN to the home AAA server is sent via a visited AAA server.

22. (Original) A wireless network as in claim 17, where the message sent from the PDSN to the home AAA server is sent via at least one broker AAA server.

23. (Original) A mobile station MS operable in a wireless network for transmitting a Registration message to a base station BS, the Registration message containing a sub-paging zone identifier SPZ_ID, said BS for sending a message to a Packet Control Function PCF, said PCF, in response to receiving the message from the BS, for sending a message to a Packet Data Serving Node PDSN, said PDSN, responsive to receiving the message from the PCF, for sending a message to a home Authentication, Authorization and Accounting AAA server, said home AAA server

recording information that is indicative of a current location of the MS, and further being responsive to a query received in response to an occurrence of a network initiated data session (NIDS) for the MS, for returning at least the current location of the MS for enabling data to be received by the MS at its current location.

24. (Original) A MS as in claim 23, where the MS is identified by its International Mobile Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.

25. (Original) A MS as in claim 23, where the information comprises the sub-paging zone identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the PDSN.

26. (Original) A MS as in claim 25, where querying comprises querying the home AAA server to obtain at least the SPZ_ID, PZID and PDSN IP Address that are recorded for the MS.

27. (Original) A MS as in claim 23, where the message sent from the PDSN to the home AAA server is sent via at least one of a visited AAA server and a broker AAA server.

28. (Original) A base station BS operable in a wireless network for receiving a Registration message from a mobile station MS, the Registration message containing a sub-paging zone identifier SPZ_ID, said BS, in response to receiving the Registration message, sending a message to a Packet Control Function PCF, said PCF, in response to receiving the message from the BS, for sending a message to a Packet Data Serving Node PDSN, said PDSN, responsive to receiving the message from the PCF, for sending a message to a home Authentication, Authorization and Accounting AAA server, said home AAA server recording information that is indicative of a current location of the MS, and further being responsive to a query received in response to an occurrence of a network initiated data session (NIDS) for the MS, for returning at least the current location of the MS for enabling data to be received by the MS at its current location via the BS.

29. (Original) A BS as in claim 28, where the MS is identified by its International Mobile Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.

30. (Original) A BS as in claim 28, where the information comprises the sub-paging zone identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the PDSN.

31. (Original) A BS as in claim 30, where querying comprises querying the home AAA server to obtain at least the SPZ_ID, PZID and PDSN IP Address that are recorded for the MS.

32. (Original) A BS as in claim 28, where the message sent from the PDSN to the home AAA server is sent via at least one of a visited AAA server and a broker AAA server.

33. (Canceled)

34. (New) A network comprising a plurality of computer readable memories, tangibly embodying programs of instructions executable by respective processors for performing operations, said operations comprising:

receiving, by a base station BS, a message from a mobile station MS within a wireless network, the message indicating a current location of the MS and that the MS is in an Idle state; and

triggering the sending of further messages in the wireless network from the BS to a Packet Control Function PCF, and from the PCF to a Packet Data Serving Node PDSN, and from the PDSN to an Authentication, Authorization and Accounting AAA server, such that information that is indicative of a current BS/PCF/PDSN affiliation of the MS at the current location of the MS is recorded by the AAA server.

35. (New) A computer readable memory as in claim 34, where the MS is identified by its International Mobile Subscriber Identity IMSI, and where the PDSN is identified by its Internet

Protocol IP address.

36. (New) A computer readable memory as in claim 34, further comprising, in response to a presence of packet data to be sent to the MS, querying the AAA server to obtain the current BS/PCF/PDSN affiliation of the MS.

37. (New) A computer readable memory, tangibly embodying a program of instructions executable by a processor for performing operations, said operations comprising:

in response to receiving a Registration message from a MS at a base station BS, the Registration message containing a sub-paging zone identifier SPZ_ID, sending further messages in an associated wireless network from the BS to a Packet Control Function PCF, from the PCF to a Packet Data Serving Node PDSN, and from the PDSN to an Authentication, Authorization and Accounting AAA server, such that information that is indicative of a current location of the MS is recorded by the AAA server; and

in response to an occurrence of a network initiated data session (NIDS) for the MS, querying the AAA server to obtain at least the current location of the MS.

38. (New) A computer readable memory as in claim 37, where the MS is identified by its International Mobile Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.

39. (New) A computer readable memory as in claim 37, where the information comprises the sub-paging zone identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the PDSN.